SUBJECT INDEX

Adjustment

Adjusting Temperature Parameters to Reflect Well-Watered Conditions, B. Temesgen, R. G. Allen and D. T. Jensen, IR Jan./Feb. 99, p26-33.

Aerodynamic forces

Evapotranspiration: Concepts and Future Trends, Luis S. Pereira, Alain Perrier, Richard G. Allen and Isabel Alves, IR Mar./Apr. 99, p45-51.

Agricultural wastes

Subirrigation and Intercropping to Minimize Nitrate Leaching from Corn Production Systems, J. Wambua Kaluli, Chandra A. Madramootoo, Xiaomin Zhou, Angus F. MacKenzie and Donald L. Smith, IR Mar./Apr. 99, p52-58.

Agriculture

Problems of Irrigation in Developing Countries, Phillip Z. Kirpich, Dorota Z. Haman and Stuart W. Styles, IR Jan./Feb. 99, p1-6.

Air temperature

Adjusting Temperature Parameters to Reflect Well-Watered Conditions, B. Temesgen, R. G. Allen and D. T. Jensen, IR Jan./Feb. 99, p26-33.

Alluvial channels

Stability and Mobility of Sand-Bed Channels Affected by Seepage, Achanta Ramakrishna Rao and Nagaraj Sitaram, IR Nov./Dec. 99, p370-379.

Analytical techniques

Analytical Modeling of Nitrogen Dynamics in Soils and Ground Water, A. Jake Gusman and Miguel A. Mariño, IR Nov./Dec. 99, p330-337.

Application methods

Irrigation Performance Measures: Efficiency and Uniformity, C. M. Burt, A. J. Clemmens, T. S. Strelkoff, K. H. Solomon, R. D. Bliesner, L. A. Hardy, T. A. Howell and D.E. Eisenhauer, IR Nov./Dec. 97, p423-442.

LEPA and Spray Irrigation for Grain Crops, Arland D. Schneider and Terry A. Howell, IR July/Aug. 99, p167-172.

Aquifers

Analytical Ground-Water Flow Solutions for Channel-Aquifer Interaction, Avi Ostfeld, Eusuff Muzaffar and Kevin E. Lansey, IR July/Aug. 99, p196-202.

Development of Management Models for Sustainable Use of Coastal Aquifers, Amlan Das and Bithin Datta, IR May/June 99, p112-121.

Estimation of Hydraulic Diffusivity in Stream-Aquifer System, Govinda C. Mishra and Sharad K. Jain, IR Mar./Apr. 99, p74-81.

Nitrate Dynamics Under Cyclic Irrigation Pumpage, Chittaranjan Ray and Walton R. Kelly, IR Sept./Oct. 99, p254-263.

Arid lands

Adjusting Temperature Parameters to Reflect Well-Watered Conditions, B. Temesgen, R. G. Allen and D. T. Jensen, IR Jan./Feb. 99, p26-33.

Vadose Zone Flow and Transport in Cracked Heavy Textured Soil, Bhaskar Joshi and Charles Maulé, IR May/June 99, p122-130.

Automation

Response of ASCE Task Committee Test Cases to Open-Loop Control Measures, E. Bautista and A. J. Clemmens, IR July/Aug. 99, p179-188.

Baffles

Baffle Sluice Modules with Improved Performance, Arif A. Anwar, IR Mar./Apr. 99, p91-95.

Boussinesq equations

Transient Drainage to Partially Penetrating Drains in Sloping Aquifers, K. N. Shukla, H. S. Chauhan and V. K. Srivastava, IR Sept./Oct. 99, p246-253.

Canals

Analytical Ground-Water Flow Solutions for Channel-Aquifer Interaction, Avi Ostfeld, Eusuff Muzaffar and Kevin E. Lansey, IR July/Aug. 99, p196-202.

Control of Canal Flow by Adjoint Sensitivity Method, Brett F. Sanders and Nikolaos D. Katopodes, IR Sept./Oct. 99, p287-297.

Modeling of Irrigation and Drainage Canals for Controller Design, Schuurmans J., A. J. Clemmens, S. Dijkstra, A. Hof and R. Brouwer, IR Nov./Dec. 99, p338-344.

Response of ASCE Task Committee Test Cases to Open-Loop Control Measures, E. Bautista and A. J. Clemmens, IR July/Aug. 99, p179-188.

Simple Water Level Controller for Irrigation and Drainage Canals, J. Schuurmans, A. Hof, S. Dijkstra, O. H. Bosgra and R. Brouwer, IR July/Aug. 99, p189-195.

Center-pivot irrigation

Friction Correction Factors for Center-Pivots, Arif A. Anwar, IR Sept./Oct. 99, p280-286.

Channels, waterways

Theoretical End-Depth-Discharge Relationship for Free Overfall, Vito Ferro, IR Jan./Feb. 99, p40-44.

Chemicals

Nitrate Electromigration in Sandy Soil in the Presence of Hydraulic Flow, Naglaa Eid, Dennis Larson, Donald Slack and Panagioyis Kiousis, IR Jan./Feb. 99, p7-11.

Civil engineering

Ancient Machu Picchu Drainage Engineering, Kenneth R. Wright, Alfredo Valencia Zegarra and William L. Lorah, IR Nov./Dec. 99, p360-369.

Climatic data

Regional Regression Models of Annual Streamflow for the United States, Richard M. Vogel, Ian Wilson and Chris Daly, IR May/June 99, p148-157.

Climatology

Evapotranspiration: Concepts and Future Trends, Luis S. Pereira, Alain Perrier, Richard G. Allen and Isabel Alves, IR Mar./Apr. 99, p45-51.

Coastal environment

Development of Management Models for Sustainable Use of Coastal Aquifers, Amlan Das and Bithin Datta, IR May/June 99, p112-121.

Combined sewers

Sewer Sideweir with Throttling Pipe, Giuseppe Del Giudice and Willi H. Hager, IR Sept./Oct. 99, p298-306.

Control structures

Modeling of Irrigation and Drainage Canals for Controller Design, Schuurmans J., A. J. Clemmens, S. Dijkstra, A. Hof and R. Brouwer, IR Nov./Dec. 99, p338-344.

Simple Water Level Controller for Irrigation and Drainage Canals, J. Schuurmans, A. Hof, S. Dijkstra, O. H. Bosgra and R. Brouwer, IR July/Aug. 99, p189-195.

Control systems

Controlling Irrigation Water Flow to Mole Drains, E. W. Christen and G. Spoor, IR Mar./Apr. 99, p59-63.

Conveyance structures

Irrigation Offtake Sensitivity, D. Renault and H. M. Hemakumara, IR May/June 99, p131-136.

Cracks

Vadose Zone Flow and Transport in Cracked Heavy Textured Soil, Bhaskar Joshi and Charles Maulé, IR May/June 99, p122-130.

Crops

LEPA and Spray Irrigation for Grain Crops, Arland D. Schneider and Terry A. Howell, IR July/Aug. 99, p167-172.

Subirrigation and Intercropping to Minimize Nitrate Leaching from Corn Production Systems, J. Wambua Kaluli, Chandra A. Madramootoo, Xiaomin Zhou, Angus F. MacKenzie and Donald L. Smith, IR Mar./Apr. 99, p52-58.

Delivery

Irrigation Offtake Sensitivity, D. Renault and H. M. Hemakumara, IR May/June 99, p131-136.

Offtake Sensitivity, Operation Effectiveness, and Performance of Irrigation System, D. Renault, IR May/June 99, p137-147.

Developing countries

Problems of Irrigation in Developing Countries, Phillip Z. Kirpich, Dorota Z. Haman and Stuart W. Styles, IR Jan./Feb. 99, p1-6.

Differential equations

Modeling Water Uptake by Plant Roots, Shashi Mathur and Sandhya Rao, IR May/June 99, p159-165.

Diffusion

Modeling Sorption Behavior of Atrazine on Intact Soil Columns, Jinhe Li, Shiv O. Prasher, Roberto S. Clemente, William D. Reynolds, Ward N. Smith, Donald S. Gamble, Edward Topp, Cooper H. Langford and Farhad Salehi, IR July/Aug. 99, p212-222.

Diffusivity

Estimation of Hydraulic Diffusivity in Stream-Aquifer System, Govinda C. Mishra and Sharad K. Jain, IR Mar./Apr. 99, p74-81.

Dimensional analysis

Effects of Temperature Changes on Emitter Discharge, Leonor Rodríguez-Sinobas, Luis Juana and Alberto Losada, IR Mar./Apr. 99, p64-73.

Discharge

Baffle Sluice Modules with Improved Performance, Arif A. Anwar, IR Mar./Apr. 99, p91-95.

Effects of Temperature Changes on Emitter Discharge, Leonor Rodríguez-Sinobas, Luis Juana and Alberto Losada, IR Mar./Apr. 99, p64-73.

Measuring Irrigation Well Discharges, John Replogle, IR July/Aug. 99, p223-229.

Regional Regression Models of Annual Streamflow for the United States, Richard M. Vogel, Ian Wilson and Chris Daly, IR May/June 99, p148-157.

Theoretical End-Depth-Discharge Relationship for Free Overfall, Vito Ferro, IR Jan./Feb. 99, p40-44.

Theory of Pipe Drainage Assisted by Mole Drainage, Helmi M. Hathoot, IR Mar./Apr. 98, p102-107.

Distribution patterns

Estimation of Global Irrigation Distribution Uniformity, A. J. Clemmens and K. H. Solomon, IR Nov./Dec. 97, p454-461.

Irrigation Performance Measures: Efficiency and Uniformity, C. M. Burt, A. J. Clemmens, T. S. Strelkoff, K. H. Solomon, R. D. Bliesner, L. A. Hardy, T. A. Howell and D.E. Eisenhauer, IR Nov./Dec. 97, p423-442.

Drainage

Controlling Irrigation Water Flow to Mole Drains, E. W. Christen and G. Spoor, IR Mar./Apr. 99, p59-63.

Modeling of Irrigation and Drainage Canals for Controller Design, Schuurmans J., A. J. Clemmens, S. Dijkstra, A. Hof and R. Brouwer, IR Nov./Dec. 99, p338-344.

Simple Water Level Controller for Irrigation and Drainage Canals, J. Schuurmans, A. Hof, S. Dijkstra, O. H. Bosgra and R. Brouwer, IR July/Aug. 99, p189-195.

Transient Drainage to Partially Penetrating Drains in Sloping Aquifers, K. N. Shukla, H. S. Chauhan and V. K. Srivastava, IR Sept./Oct. 99, p246-253.

Drainage basins

Sand Recovery for Highway Drainage Designs, James C. Y. Guo, IR Nov./Dec. 99, p380-384.

Drainage systems

Ancient Machu Picchu Drainage Engineering, Kenneth R. Wright, Alfredo Valencia Zegarra and William L. Lorah, IR Nov./Dec. 99, p360-369.

Drains

Theory of Pipe Drainage Assisted by Mole Drainage, Helmi M. Hathoot, IR Mar./Apr. 98, p102-107.

Economics

Economics of Furrow Irrigation under Partial Infiltration Information, H. Ito, W. W. Wallender and N. S. Raghuwanshi, IR May/June 99, p105-111.

Efficiency

Sediment Removal Efficiency of Settling Basins, K. G. Ranga Raju, U. C. Kothyari, Somya Srivastav and Manish Saxena, IR Sept./Oct. 99, p308-314.

Simulating Furrow Irrigation with Different Inflow Patterns, A. A. Alazba, IR Jan./Feb. 99, p12-18.

Electrokinetics

Nitrate Electromigration in Sandy Soil in the Presence of Hydraulic Flow, Naglaa Eid, Dennis Larson, Donald Slack and Panagioyis Kiousis, IR Jan./Feb. 99, p7-11.

Emittance

Effects of Temperature Changes on Emitter Discharge, Leonor Rodríguez-Sinobas, Luis Juana and Alberto Losada, IR Mar./Apr. 99, p64-73.

SUBJECT INDEX

Adjustment

Adjusting Temperature Parameters to Reflect Well-Watered Conditions, B. Temesgen, R. G. Allen and D. T. Jensen, IR Jan./Feb. 99, p26-33.

Aerodynamic forces

Evapotranspiration: Concepts and Future Trends, Luis S. Pereira, Alain Perrier, Richard G. Allen and Isabel Alves, IR Mar./Apr. 99, p45-51.

Agricultural wastes

Subirrigation and Intercropping to Minimize Nitrate Leaching from Corn Production Systems, J. Wambua Kaluli, Chandra A. Madramootoo, Xiaomin Zhou, Angus F. MacKenzie and Donald L. Smith, IR Mar./Apr. 99, p52-58.

Agriculture

Problems of Irrigation in Developing Countries, Phillip Z. Kirpich, Dorota Z. Haman and Stuart W. Styles, IR Jan./Feb. 99, p1-6.

Air temperature

Adjusting Temperature Parameters to Reflect Well-Watered Conditions, B. Temesgen, R. G. Allen and D. T. Jensen, IR Jan./Feb. 99, p26-33.

Alluvial channels

Stability and Mobility of Sand-Bed Channels Affected by Seepage, Achanta Ramakrishna Rao and Nagaraj Sitaram, IR Nov./Dec. 99, p370-379.

Analytical techniques

Analytical Modeling of Nitrogen Dynamics in Soils and Ground Water, A. Jake Gusman and Miguel A. Mariño, IR Nov./Dec. 99, p330-337.

Application methods

Irrigation Performance Measures: Efficiency and Uniformity, C. M. Burt, A. J. Clemmens, T. S. Strelkoff, K. H. Solomon, R. D. Bliesner, L. A. Hardy, T. A. Howell and D.E. Eisenhauer, IR Nov./Dec. 97, p423-442.

LEPA and Spray Irrigation for Grain Crops, Arland D. Schneider and Terry A. Howell, IR July/Aug. 99, p167-172.

Aquifers

Analytical Ground-Water Flow Solutions for Channel-Aquifer Interaction, Avi Ostfeld, Eusuff Muzaffar and Kevin E. Lansey, IR July/Aug. 99, p196-202.

Development of Management Models for Sustainable Use of Coastal Aquifers, Amlan Das and Bithin Datta, IR May/June 99, p112-121.

Estimation of Hydraulic Diffusivity in Stream-Aquifer System, Govinda C. Mishra and Sharad K. Jain, IR Mar./Apr. 99, p74-81.

Nitrate Dynamics Under Cyclic Irrigation Pumpage, Chittaranjan Ray and Walton R. Kelly, IR Sept./Oct. 99, p254-263.

Arid lands

Adjusting Temperature Parameters to Reflect Well-Watered Conditions, B. Temesgen, R. G. Allen and D. T. Jensen, IR Jan./Feb. 99, p26-33.

Vadose Zone Flow and Transport in Cracked Heavy Textured Soil, Bhaskar Joshi and Charles Maulé, IR May/June 99, p122-130.

Automation

Response of ASCE Task Committee Test Cases to Open-Loop Control Measures, E. Bautista and A. J. Clemmens, IR July/Aug. 99, p179-188.

Baffles

Baffle Sluice Modules with Improved Performance, Arif A. Anwar, IR Mar./Apr. 99, p91-95.

Boussinesq equations

Transient Drainage to Partially Penetrating Drains in Sloping Aquifers, K. N. Shukla, H. S. Chauhan and V. K. Srivastava, IR Sept./Oct. 99, p246-253.

Canals

Analytical Ground-Water Flow Solutions for Channel-Aquifer Interaction, Avi Ostfeld, Eusuff Muzaffar and Kevin E. Lansey, IR July/Aug. 99, p196-202.

Control of Canal Flow by Adjoint Sensitivity Method, Brett F. Sanders and Nikolaos D. Katopodes, IR Sept./Oct. 99, p287-297.

Modeling of Irrigation and Drainage Canals for Controller Design, Schuurmans J., A. J. Clemmens, S. Dijkstra, A. Hof and R. Brouwer, IR Nov./Dec. 99, p338-344.

Response of ASCE Task Committee Test Cases to Open-Loop Control Measures, E. Bautista and A. J. Clemmens, IR July/Aug. 99, p179-188.

Simple Water Level Controller for Irrigation and Drainage Canals, J. Schuurmans, A. Hof, S. Dijkstra, O. H. Bosgra and R. Brouwer, IR July/Aug. 99, p189-195.

Center-pivot irrigation

Friction Correction Factors for Center-Pivots, Arif A. Anwar, IR Sept./Oct. 99, p280-286.

Channels, waterways

Theoretical End-Depth-Discharge Relationship for Free Overfall, Vito Ferro, IR Jan./Feb. 99, p40-44.

Chemicals

Nitrate Electromigration in Sandy Soil in the Presence of Hydraulic Flow, Naglaa Eid, Dennis Larson, Donald Slack and Panagioyis Kiousis, IR Jan./Feb. 99, p7-11.

Civil engineering

Ancient Machu Picchu Drainage Engineering, Kenneth R. Wright, Alfredo Valencia Zegarra and William L. Lorah, IR Nov./Dec. 99, p360-369.

Climatic data

Regional Regression Models of Annual Streamflow for the United States, Richard M. Vogel, Ian Wilson and Chris Daly, IR May/June 99, p148-157.

Climatology

Evapotranspiration: Concepts and Future Trends, Luis S. Pereira, Alain Perrier, Richard G. Allen and Isabel Alves, IR Mar./Apr. 99, p45-51.

Coastal environment

Development of Management Models for Sustainable Use of Coastal Aquifers, Amlan Das and Bithin Datta, IR May/June 99, p112-121.

Combined sewers

Sewer Sideweir with Throttling Pipe, Giuseppe Del Giudice and Willi H. Hager, IR Sept./Oct. 99, p298-306.

Control structures

Modeling of Irrigation and Drainage Canals for Controller Design, Schuurmans J., A. J. Clemmens, S. Dijkstra, A. Hof and R. Brouwer, IR Nov./Dec. 99, p338-344.

Simple Water Level Controller for Irrigation and Drainage Canals, J. Schuurmans, A. Hof, S. Dijkstra, O. H. Bosgra and R. Brouwer, IR July/Aug. 99, p189-195.

Control systems

Controlling Irrigation Water Flow to Mole Drains, E. W. Christen and G. Spoor, IR Mar./Apr. 99, p59-63.

Conveyance structures

Irrigation Offtake Sensitivity, D. Renault and H. M. Hemakumara, IR May/June 99, p131-136.

Cracks

Vadose Zone Flow and Transport in Cracked Heavy Textured Soil, Bhaskar Joshi and Charles Maulé, IR May/June 99, p122-130.

Crops

LEPA and Spray Irrigation for Grain Crops, Arland D. Schneider and Terry A. Howell, IR July/Aug. 99, p167-172.

Subirrigation and Intercropping to Minimize Nitrate Leaching from Corn Production Systems, J. Wambua Kaluli, Chandra A. Madramootoo, Xiaomin Zhou, Angus F. MacKenzie and Donald L. Smith, IR Mar./Apr. 99, p52-58.

Delivery

Irrigation Offtake Sensitivity, D. Renault and H. M. Hemakumara, IR May/June 99, p131-136.

Offtake Sensitivity, Operation Effectiveness, and Performance of Irrigation System, D. Renault, IR May/June 99, p137-147.

Developing countries

Problems of Irrigation in Developing Countries, Phillip Z. Kirpich, Dorota Z. Haman and Stuart W. Styles, IR Jan./Feb. 99, p1-6.

Differential equations

Modeling Water Uptake by Plant Roots, Shashi Mathur and Sandhya Rao, IR May/June 99, p159-165.

Diffusion

Modeling Sorption Behavior of Atrazine on Intact Soil Columns, Jinhe Li, Shiv O. Prasher, Roberto S. Clemente, William D. Reynolds, Ward N. Smith, Donald S. Gamble, Edward Topp, Cooper H. Langford and Farhad Salehi, IR July/Aug. 99, p212-222.

Diffusivity

Estimation of Hydraulic Diffusivity in Stream-Aquifer System, Govinda C. Mishra and Sharad K. Jain, IR Mar./Apr. 99, p74-81.

Dimensional analysis

Effects of Temperature Changes on Emitter Discharge, Leonor Rodríguez-Sinobas, Luis Juana and Alberto Losada, IR Mar./Apr. 99, p64-73.

Discharge

Baffle Sluice Modules with Improved Performance, Arif A. Anwar, IR Mar./Apr. 99, p91-95.

Effects of Temperature Changes on Emitter Discharge, Leonor Rodríguez-Sinobas, Luis Juana and Alberto Losada, IR Mar./Apr. 99, p64-73.

Measuring Irrigation Well Discharges, John Replogle, IR July/Aug. 99, p223-229.

Regional Regression Models of Annual Streamflow for the United States, Richard M. Vogel, Ian Wilson and Chris Daly, IR May/June 99, p148-157.

Theoretical End-Depth-Discharge Relationship for Free Overfall, Vito Ferro, IR Jan./Feb. 99, p40-44.

Theory of Pipe Drainage Assisted by Mole Drainage, Helmi M. Hathoot, IR Mar./Apr. 98, p102-107.

Distribution patterns

Estimation of Global Irrigation Distribution Uniformity, A. J. Clemmens and K. H. Solomon, IR Nov./Dec. 97, p454-461.

Irrigation Performance Measures: Efficiency and Uniformity, C. M. Burt, A. J. Clemmens, T. S. Strelkoff, K. H. Solomon, R. D. Bliesner, L. A. Hardy, T. A. Howell and D.E. Eisenhauer, IR Nov./Dec. 97, p423-442.

Drainage

Controlling Irrigation Water Flow to Mole Drains, E. W. Christen and G. Spoor, IR Mar./Apr. 99, p59-63.

Modeling of Irrigation and Drainage Canals for Controller Design, Schuurmans J., A. J. Clemmens, S. Dijkstra, A. Hof and R. Brouwer, IR Nov./Dec. 99, p338-344.

Simple Water Level Controller for Irrigation and Drainage Canals, J. Schuurmans, A. Hof, S. Dijkstra, O. H. Bosgra and R. Brouwer, IR July/Aug. 99, p189-195.

Transient Drainage to Partially Penetrating Drains in Sloping Aquifers, K. N. Shukla, H. S. Chauhan and V. K. Srivastava, IR Sept./Oct. 99, p246-253.

Drainage basins

Sand Recovery for Highway Drainage Designs, James C. Y. Guo, IR Nov./Dec. 99, p380-384.

Drainage systems

Ancient Machu Picchu Drainage Engineering, Kenneth R. Wright, Alfredo Valencia Zegarra and William L. Lorah, IR Nov./Dec. 99, p360-369.

Drains

Theory of Pipe Drainage Assisted by Mole Drainage, Helmi M. Hathoot, IR Mar./Apr. 98, p102-107.

Economics

Economics of Furrow Irrigation under Partial Infiltration Information, H. Ito, W. W. Wallender and N. S. Raghuwanshi, IR May/June 99, p105-111.

Efficiency

Sediment Removal Efficiency of Settling Basins, K. G. Ranga Raju, U. C. Kothyari, Somya Srivastav and Manish Saxena, IR Sept./Oct. 99, p308-314.

Simulating Furrow Irrigation with Different Inflow Patterns, A. A. Alazba, IR Jan./Feb. 99, p12-18.

Electrokinetics

Nitrate Electromigration in Sandy Soil in the Presence of Hydraulic Flow, Naglaa Eid, Dennis Larson, Donald Slack and Panagioyis Kiousis, IR Jan./Feb. 99, p7-11.

Emittance

Effects of Temperature Changes on Emitter Discharge, Leonor Rodríguez-Sinobas, Luis Juana and Alberto Losada, IR Mar./Apr. 99, p64-73.

Empirical equations
Semiempirical Infiltration Equation for Furrow Irrigation Systems, Shrini K. Upadhyaya and N. S. Raghuwanshi, IR July/Aug. 99, p173-178.

Environmental impacts
Vadose Zone Flow and Transport in Cracked Heavy Textured Soil, Bhaskar Joshi and Charles Maulé, IR May/June 99, p122-130.

Estimating
Grass ET Estimates Using Penman-Type Equations in Central Sudan, Ahmed S. A. Hussein, IR Nov./Dec. 99, p324-329.

Estimation
Estimation of Global Irrigation Distribution Uniformity, A. J. Clemmens and K. H. Solomon, IR Nov./Dec. 97, p454-461.

Evaporation
Modeling of Evaporation Reduction in Drip Irrigation System, Masoud Meshkat, Richard C. Warner and Stephen R. Workman, IR Nov./Dec. 99, p315-323.

Evapotranspiration
Adjusting Temperature Parameters to Reflect Well-Watered Conditions, B. Temesgen, R. G. Allen and D. T. Jensen, IR Jan./Feb. 99, p26-33.

Evapotranspiration: Concepts and Future Trends, Luis S. Pereira, Alain Perrier, Richard G. Allen and Isabel Alves, IR Mar./Apr. 99, p45-51.

Grass ET Estimates Using Penman-Type Equations in Central Sudan, Ahmed S. A. Hussein, IR Nov./Dec. 99, p324-329.

Single-Layer Evapotranspiration Model with Variable Canopy Resistance, Mladen Todorovic, IR Sept./Oct. 99, p235-245.

Experimentation
Sediment Removal Efficiency of Settling Basins, K. G. Ranga Raju, U. C. Kothyari, Somya Srivastav and Manish Saxena, IR Sept./Oct. 99, p308-314.

Extraction procedures
Modeling Water Uptake by Plant Roots, Shashi Mathur and Sandhya Rao, IR May/June 99, p159-165.

Factor analysis
Adjusted Factor G_a for Pipelines with Multiple Outlets and Outflow, Arif A. Anwar, IR Nov./Dec. 99, p355-359.

Field investigations
Nitrate Dynamics Under Cyclic Irrigation Pumpage, Chittaranjan Ray and Walton R. Kelly, IR Sept./Oct. 99, p254-263.

Field tests
Infiltration Considerations for Ground-Water Recharge with Waste Effluent, Sandra L. Houston, Peter D. Duryea and Ruijin Hong, IR Sept./Oct. 99, p264-272.

Finite difference method
Effective Hydraulic Conductivity for Partially Saturated Porous Media, Amithirigala W. Jayawardena and Pujitha B. G. Dissanayake, IR Mar./Apr. 99, p82-89.

Finite element method
Modeling of Evaporation Reduction in Drip Irrigation System, Masoud Meshkat, Richard C. Warner and Stephen R. Workman, IR Nov./Dec. 99, p315-323.

Flow control
Control of Canal Flow by Adjoint Sensitivity Method, Brett F. Sanders and Nikolaos D. Katopodes, IR Sept./Oct. 99, p287-297.

Flow measurement
Measuring Irrigation Well Discharges, John Replogle, IR July/Aug. 99, p223-229.

Theoretical End-Depth-Discharge Relationship for Free Overfall, Vito Ferro, IR Jan./Feb. 99, p40-44.

Flow profiles
Measuring Irrigation Well Discharges, John Replogle, IR July/Aug. 99, p223-229.

Flushing
Sediment Removal Efficiency of Settling Basins, K. G. Ranga Raju, U. C. Kothyari, Somya Srivastav and Manish Saxena, IR Sept./Oct. 99, p308-314.

Friction
Factor G for Pipelines with Equally Spaced Multiple Outlets and Outflow, Arif A. Anwar, IR Jan./Feb. 99, p34-38.

Friction factor
Friction Correction Factors for Center-Pivots, Arif A. Anwar, IR Sept./Oct. 99, p280-286.

Furrow irrigation
Economics of Furrow Irrigation under Partial Infiltration Information, H. Ito, W. W. Wallender and N. S. Raghuwanshi, IR May/June 99, p105-111.

Explicit Time of Advance Formula for Furrow Design, John D. Valiantzas, IR Jan./Feb. 99, p19-25.

Explicit Volume Balance Model Solution, A. A. Alazba, IR Sept./Oct. 99, p273-279.

Semiempirical Infiltration Equation for Furrow Irrigation Systems, Shrini K. Upadhyaya and N. S. Raghuwanshi, IR July/Aug. 99, p173-178.

Simulating Furrow Irrigation with Different Inflow Patterns, A. A. Alazba, IR Jan./Feb. 99, p12-18.

Gates
Baffle Sluice Modules with Improved Performance, Arif A. Anwar, IR Mar./Apr. 99, p91-95.

Grasses
Grass ET Estimates Using Penman-Type Equations in Central Sudan, Ahmed S. A. Hussein, IR Nov./Dec. 99, p324-329.

Ground water
Analytical Ground-Water Flow Solutions for Channel-Aquifer Interaction, Avi Ostfeld, Eusuff Muzaffar and Kevin E. Lansey, IR July/Aug. 99, p196-202.

Ground-water pollution
Nitrate Electromigration in Sandy Soil in the Presence of Hydraulic Flow, Naglaa Eid, Dennis Larson, Donald Slack and Panagioyis Kiousis, IR Jan./Feb. 99, p7-11.

Ground-water recharge
Infiltration Considerations for Ground-Water Recharge with Waste Effluent, Sandra L. Houston, Peter D. Duryea and Ruijin Hong, IR Sept./Oct. 99, p264-272.

Head loss
Friction Correction Factors for Center-Pivots, Arif A. Anwar, IR Sept./Oct. 99, p280-286.

Herbicides
Modeling Sorption Behavior of Atrazine on Intact Soil Columns, Jinhe Li, Shiv O. Prasher, Roberto S. Clemente, William D. Reynolds, Ward N. Smith, Donald S. Gamble, Edward Topp, Cooper H. Langford and Farhad Salehi, IR July/Aug. 99, p212-222.

Highway surfaces
Sand Recovery for Highway Drainage Designs, James C. Y. Guo, IR Nov./Dec. 99, p380-384.

Historic sites
Ancient Machu Picchu Drainage Engineering, Kenneth R. Wright, Alfredo Valencia Zegarra and William L. Lorah, IR Nov./Dec. 99, p360-369.

Humid areas
Modeling Hydrological Processes in Hillslope Watershed of Humid Tropics, Noble Abraham and K. N. Tiwari, IR July/Aug. 99, p203-211.

Hydraulic conductivity
Effective Hydraulic Conductivity for Partially Saturated Porous Media, Amithirigala W. Jayawardena and Pujitha B. G. Dissanayake, IR Mar./Apr. 99, p82-89.

Modeling Hydrological Processes in Hillslope Watershed of Humid Tropics, Noble Abraham and K. N. Tiwari, IR July/Aug. 99, p203-211.

Theory of Pipe Drainage Assisted by Mole Drainage, Helmi M. Hathoot, IR Mar./Apr. 98, p102-107.

Hydraulics
Estimation of Hydraulic Diffusivity in Stream-Aquifer System, Govinda C. Mishra and Sharad K. Jain, IR Mar./Apr. 99, p74-81.

Infiltration Considerations for Ground-Water Recharge with Waste Effluent, Sandra L. Houston, Peter D. Duryea and Ruijin Hong, IR Sept./Oct. 99, p264-272.

Sewer Sideweir with Throttling Pipe, Giuseppe Del Giudice and Willi H. Hager, IR Sept./Oct. 99, p298-306.

Hydrologic data
Regional Regression Models of Annual Streamflow for the United States, Richard M. Vogel, Ian Wilson and Chris Daly, IR May/June 99, p148-157.

Hydrologic models
Modeling Hydrological Processes in Hillslope Watershed of Humid Tropics, Noble Abraham and K. N. Tiwari, IR July/Aug. 99, p203-211.

Incipient motion
Stability and Mobility of Sand-Bed Channels Affected by Seepage, Achanta Ramakrishna Rao and Nagaraj Sitaram, IR Nov./Dec. 99, p370-379.

Infiltration
Economics of Furrow Irrigation under Partial Infiltration Information, H. Ito, W. W. Wallender and N. S. Raghuwanshi, IR May/June 99, p105-111.

Explicit Time of Advance Formula for Furrow Design, John D. Valiantzas, IR Jan./Feb. 99, p19-25.

Infiltration Considerations for Ground-Water Recharge with Waste Effluent, Sandra L. Houston, Peter D. Duryea and Ruijin Hong, IR Sept./Oct. 99, p264-272.

Kostiakov Infiltration Parameters from Kinematic Wave Model, Joel Cahoon, IR Mar./Apr. 98, p127-130.

Semiempirical Infiltration Equation for Furrow Irrigation Systems, Shrini K. Upadhyaya and N. S. Raghuwanshi, IR July/Aug. 99, p173-178.

Simulating Furrow Irrigation with Different Inflow Patterns, A. A. Alazba, IR Jan./Feb. 99, p12-18.

Inflow
Simulating Furrow Irrigation with Different Inflow Patterns, A. A. Alazba, IR Jan./Feb. 99, p12-18.

Institutions
Problems of Irrigation in Developing Countries, Phillip Z. Kirpich, Dorota Z. Haman and Stuart W. Styles, IR Jan./Feb. 99, p1-6.

Interactions
Analytical Ground-Water Flow Solutions for Channel-Aquifer Interaction, Avi Ostfeld, Eusuff Muzaffar and Kevin E. Lansey, IR July/Aug. 99, p196-202.

Estimation of Hydraulic Diffusivity in Stream-Aquifer System, Govinda C. Mishra and Sharad K. Jain, IR Mar./Apr. 99, p74-81.

Irrigation
Irrigation Offtake Sensitivity, D. Renault and H. M. Hemakumara, IR May/June 99, p131-136.

LEPA and Spray Irrigation for Grain Crops, Arland D. Schneider and Terry A. Howell, IR July/Aug. 99, p167-172.

Measuring Irrigation Well Discharges, John Replogle, IR July/Aug. 99, p223-229.

Modeling of Irrigation and Drainage Canals for Controller Design, Schuurmans J., A. J. Clemmens, S. Dijkstra, A. Hof and R. Brouwer, IR Nov./Dec. 99, p338-344.

Nitrate Dynamics Under Cyclic Irrigation Pumpage, Chittaranjan Ray and Walton R. Kelly, IR Sept./Oct. 99, p254-263.

Simple Water Level Controller for Irrigation and Drainage Canals, J. Schuurmans, A. Hof, S. Dijkstra, O. H. Bosgra and R. Brouwer, IR July/Aug. 99, p189-195.

Irrigation efficiency
Baffle Sluice Modules with Improved Performance, Arif A. Anwar, IR Mar./Apr. 99, p91-95.

Controlling Irrigation Water Flow to Mole Drains, E. W. Christen and G. Spoor, IR Mar./Apr. 99, p59-63.

Grass ET Estimates Using Penman-Type Equations in Central Sudan, Ahmed S. A. Hussein, IR Nov./Dec. 99, p324-329.

Irrigation Performance Measures: Efficiency and Uniformity, C. M. Burt, A. J. Clemmens, T. S. Strelkoff, K. H. Solomon, R. D. Bliesner, L. A. Hardy, T. A. Howell and D.E. Eisenhauer, IR Nov./Dec. 97, p423-442.

Modeling of Evaporation Reduction in Drip Irrigation System, Masoud Meshkat, Richard C. Warner and Stephen R. Workman, IR Nov./Dec. 99, p315-323.

Offtake Sensitivity, Operation Effectiveness, and Performance of Irrigation System, D. Renault, IR May/June 99, p137-147.

Response of ASCE Task Committee Test Cases to Open-Loop Control Measures, E. Bautista and A. J. Clemmens, IR July/Aug. 99, p179-188.

Irrigation practices
Problems of Irrigation in Developing Countries, Phillip Z. Kirpich, Dorota Z. Haman and Stuart W. Styles, IR Jan./Feb. 99, p1-6.

Irrigation systems
Estimation of Global Irrigation Distribution Uniformity, A. J. Clemmens and K. H. Solomon, IR Nov./Dec. 97, p454-461.

Offtake Sensitivity, Operation Effectiveness, and Performance of Irrigation System, D. Renault, IR May/June 99, p137-147.

Optimal Allocation of Irrigation Water Supplies in Real Time, Robin Wardlaw and Jonathan Barnes, IR Nov./Dec. 99, p345-354.

Response of ASCE Task Committee Test Cases to Open-Loop Control Measures, E. Bautista and A. J. Clemmens, IR July/Aug. 99, p179-188.

Kinematic wave theory

Economics of Furrow Irrigation under Partial Infiltration Information, H. Ito, W. W. Wallender and N. S. Raghuwanshi, IR May/June 99, p105-111.

Laboratory tests

Infiltration Considerations for Ground-Water Recharge with Waste Effluent, Sandra L. Houston, Peter D. Duryea and Ruijin Hong, IR Sept./Oct. 99, p264-272.

Laplace transform

Analytical Ground-Water Flow Solutions for Channel-Aquifer Interaction, Avi Ostfeld, Eusuff Muzaffar and Kevin E. Lansey, IR July/Aug. 99, p196-202.

Estimation of Hydraulic Diffusivity in Stream-Aquifer System, Govinda C. Mishra and Sharad K. Jain, IR Mar./Apr. 99, p74-81.

Leaching

Analytical Modeling of Nitrogen Dynamics in Soils and Ground Water, A. Jake Gusman and Miguel A. Mariño, IR Nov./Dec. 99, p330-337.

Modeling Sorption Behavior of Atrazine on Intact Soil Columns, Jinhe Li, Shiv O. Prasher, Roberto S. Clemente, William D. Reynolds, Ward N. Smith, Donald S. Gamble, Edward Topp, Cooper H. Langford and Farhad Salehi, IR July/Aug. 99, p212-222.

Subirrigation and Intercropping to Minimize Nitrate Leaching from Corn Production Systems, J. Wambua Kaluli, Chandra A. Madramootoo, Xiaomin Zhou, Angus F. MacKenzie and Donald L. Smith, IR Mar./Apr. 99, p52-58.

Least squares method

Estimation of Hydraulic Diffusivity in Stream-Aquifer System, Govinda C. Mishra and Sharad K. Jain, IR Mar./Apr. 99, p74-81.

Lysimeters

Modeling of Evaporation Reduction in Drip Irrigation System, Masoud Meshkat, Richard C. Warner and Stephen R. Workman, IR Nov./Dec. 99, p315-323.

Mathematical models

Modeling Water Uptake by Plant Roots, Shashi Mathur and Sandhya Rao, IR May/June 99, p159-165.

Meteorological data

Single-Layer Evapotranspiration Model with Variable Canopy Resistance, Mladen Todorovic, IR Sept./Oct. 99, p235-245.

Migration

Nitrate Electromigration in Sandy Soil in the Presence of Hydraulic Flow, Naglaa Eid, Dennis Larson, Donald Slack and Panagioyis Kiousis, IR Jan./Feb. 99, p7-11.

Model verification

Modeling of Irrigation and Drainage Canals for Controller Design, Schuurmans J., A. J. Clemmens, S. Dijkstra, A. Hof and R. Brouwer, IR Nov./Dec. 99, p338-344.

Modeling

Kostiakov Infiltration Parameters from Kinematic Wave Model, Joel Cahoon, IR Mar./Apr. 98, p127-130.

Semiempirical Infiltration Equation for Furrow Irrigation Systems, Shrini K. Upadhyaya and N. S. Raghuwanshi, IR July/Aug. 99, p173-178.

Single-Layer Evapotranspiration Model with Variable Canopy Resistance, Mladen Todorovic, IR Sept./Oct. 99, p235-245.

Models

Analytical Modeling of Nitrogen Dynamics in Soils and Ground Water, A. Jake Gusman and Miguel A. Mariño, IR Nov./Dec. 99, p330-337.

Explicit Volume Balance Model Solution, A. A. Alazba, IR Sept./Oct. 99, p273-279.

Moisture content

Modeling Water Uptake by Plant Roots, Shashi Mathur and Sandhya Rao, IR May/June 99, p159-165.

Multiple objective analysis

Development of Management Models for Sustainable Use of Coastal Aquifers, Amlan Das and Bithin Datta, IR May/June 99, p112-121.

Native Americans

Ancient Machu Picchu Drainage Engineering, Kenneth R. Wright, Alfredo Valencia Zegarra and William L. Lorah, IR Nov./Dec. 99, p360-369.

Nitrates

Analytical Modeling of Nitrogen Dynamics in Soils and Ground Water, A. Jake Gusman and Miguel A. Mariño, IR Nov./Dec. 99, p330-337.

Nitrate Dynamics Under Cyclic Irrigation Pumpage, Chittaranjan Ray and Walton R. Kelly, IR Sept./Oct. 99, p254-263.

Nitrate Electromigration in Sandy Soil in the Presence of Hydraulic Flow, Naglaa Eid, Dennis Larson, Donald Slack and Panagioyis Kiousis, IR Jan./Feb. 99, p7-11.

Subirrigation and Intercropping to Minimize Nitrate Leaching from Corn Production Systems, J. Wambua Kaluli, Chandra A. Madramootoo, Xiaomin Zhou, Angus F. MacKenzie and Donald L. Smith, IR Mar./Apr. 99, p52-58.

Nitrogen

Analytical Modeling of Nitrogen Dynamics in Soils and Ground Water, A. Jake Gusman and Miguel A. Mariño, IR Nov./Dec. 99, p330-337.

Nonpoint pollution

Sand Recovery for Highway Drainage Designs, James C. Y. Guo, IR Nov./Dec. 99, p380-384.

Numerical models

Transient Drainage to Partially Penetrating Drains in Sloping Aquifers, K. N. Shukla, H. S. Chauhan and V. K. Srivastava, IR Sept./Oct. 99, p246-253.

Open channels

Control of Canal Flow by Adjoint Sensitivity Method, Brett F. Sanders and Nikolaos D. Katopodes, IR Sept./Oct. 99, p287-297.

Stability and Mobility of Sand-Bed Channels Affected by Seepage, Achanta Ramakrishna Rao and Nagaraj Sitaram, IR Nov./Dec. 99, p370-379.

Open loop control systems

Response of ASCE Task Committee Test Cases to Open-Loop Control Measures, E. Bautista and A. J. Clemmens, IR July/Aug. 99, p179-188.

Optimal design

Baffle Sluice Modules with Improved Performance, Arif A. Anwar, IR Mar./Apr. 99, p91-95.

Explicit Time of Advance Formula for Furrow Design, John D. Valiantzas, IR Jan./Feb. 99, p19-25.

Optimization

Economics of Furrow Irrigation under Partial Infiltration Information, H. Ito, W. W. Wallender and N. S. Raghuwanshi, IR May/June 99, p105-111.

Optimal Allocation of Irrigation Water Supplies in Real Time, Robin Wardlaw and Jonathan Barnes, IR Nov./Dec. 99, p345-354.

Organizational policy

Problems of Irrigation in Developing Countries, Phillip Z. Kirpich, Dorota Z. Haman and Stuart W. Styles, IR Jan./Feb. 99, p1-6.

Outflows

Adjusted Factor G_a for Pipelines with Multiple Outlets and Outflow, Arif A. Anwar, IR Nov./Dec. 99, p355-359.

Factor G for Pipelines with Equally Spaced Multiple Outlets and Outflow, Arif A. Anwar, IR Jan./Feb. 99, p34-38.

Overflow

Sewer Sideweir with Throttling Pipe, Giuseppe Del Giudice and Willi H. Hager, IR Sept./Oct. 99, p298-306.

Parameters

Kostiakov Infiltration Parameters from Kinematic Wave Model, Joel Cahoon, IR Mar./Apr. 98, p127-130.

Partially saturated soils

Effective Hydraulic Conductivity for Partially Saturated Porous Media, Amithirigala W. Jayawardena and Pujitha B. G. Dissanayake, IR Mar./Apr. 99, p82-89.

Particle motion

Stability and Mobility of Sand-Bed Channels Affected by Seepage, Achanta Ramakrishna Rao and Nagaraj Sitaram, IR Nov./Dec. 99, p370-379.

Performance

Estimation of Global Irrigation Distribution Uniformity, A. J. Clemmens and K. H. Solomon, IR Nov./Dec. 97, p454-461.

Offtake Sensitivity, Operation Effectiveness, and Performance of Irrigation System, D. Renault, IR May/June 99, p137-147.

Performance evaluation

Irrigation Performance Measures: Efficiency and Uniformity, C. M. Burt, A. J. Clemmens, T. S. Strelkoff, K. H. Solomon, R. D. Bliesner, L. A. Hardy, T. A. Howell and D.E. Eisenhauer, IR Nov./Dec. 97, p423-442.

Pesticides

Modeling Sorption Behavior of Atrazine on Intact Soil Columns, Jinhe Li, Shiv O. Prasher, Roberto S. Clemente, William D. Reynolds, Ward N. Smith, Donald S. Gamble, Edward Topp, Cooper H. Langford and Farhad Salehi, IR July/Aug. 99, p212-222.

Pipeline design

Factor G for Pipelines with Equally Spaced Multiple Outlets and Outflow, Arif A. Anwar, IR Jan./Feb. 99, p34-38.

Pipelines

Adjusted Factor G_a for Pipelines with Multiple Outlets and Outflow, Arif A. Anwar, IR Nov./Dec. 99, p355-359.

Pipes

Sewer Sideweir with Throttling Pipe, Giuseppe Del Giudice and Willi H. Hager, IR Sept./Oct. 99, p298-306.

Theory of Pipe Drainage Assisted by Mole Drainage, Helmi M. Hathoot, IR Mar./Apr. 98, p102-107.

Porous media

Effective Hydraulic Conductivity for Partially Saturated Porous Media, Amithirigala W. Jayawardena and Pujitha B. G. Dissanayake, IR Mar./Apr. 99, p82-89.

Pumping

Nitrate Dynamics Under Cyclic Irrigation Pumpage, Chittaranjan Ray and Walton R. Kelly, IR Sept./Oct. 99, p254-263.

Real-time programming

Optimal Allocation of Irrigation Water Supplies in Real Time, Robin Wardlaw and Jonathan Barnes, IR Nov./Dec. 99, p345-354.

Recharge basins

Infiltration Considerations for Ground-Water Recharge with Waste Effluent, Sandra L. Houston, Peter D. Duryea and Ruijin Hong, IR Sept./Oct. 99, p264-272.

Recovery planning

Sand Recovery for Highway Drainage Designs, James C. Y. Guo, IR Nov./Dec. 99, p380-384.

Regional analysis

Adjusting Temperature Parameters to Reflect Well-Watered Conditions, B. Temesgen, R. G. Allen and D. T. Jensen, IR Jan./Feb. 99, p26-33.

Regional Regression Models of Annual Streamflow for the United States, Richard M. Vogel, Ian Wilson and Chris Daly, IR May/June 99, p148-157.

Regression models

Regional Regression Models of Annual Streamflow for the United States, Richard M. Vogel, Ian Wilson and Chris Daly, IR May/June 99, p148-157.

Remedial action

Infiltration Considerations for Ground-Water Recharge with Waste Effluent, Sandra L. Houston, Peter D. Duryea and Ruijin Hong, IR Sept./Oct. 99, p264-272.

Resistance

Single-Layer Evapotranspiration Model with Variable Canopy Resistance, Mladen Todorovic, IR Sept./Oct. 99, p235-245.

Resistance factors

Evapotranspiration: Concepts and Future Trends, Luis S. Pereira, Alain Perrier, Richard G. Allen and Isabel Alves, IR Mar./Apr. 99, p45-51.

Salt water intrusion

Development of Management Models for Sustainable Use of Coastal Aquifers, Amlan Das and Bithin Datta, IR May/June 99, p112-121.

Sampling

Economics of Furrow Irrigation under Partial Infiltration Information, H. Ito, W. W. Wallender and N. S. Raghuwanshi, IR May/June 99, p105-111.

Sand

Sand Recovery for Highway Drainage Designs, James C. Y. Guo, IR Nov./Dec. 99, p380-384.

Seasonal variations
Adjusting Temperature Parameters to Reflect Well-Watered Conditions, B. Temesgen, R. G. Allen and D. T. Jensen, IR Jan./Feb. 99, p26-33.

Sediment transport
Stability and Mobility of Sand-Bed Channels Affected by Seepage, Achanta Ramakrishna Rao and Nagaraj Sitaram, IR Nov./Dec. 99, p370-379.

Seepage
Stability and Mobility of Sand-Bed Channels Affected by Seepage, Achanta Ramakrishna Rao and Nagaraj Sitaram, IR Nov./Dec. 99, p370-379.

Sensitivity analysis
Control of Canal Flow by Adjoint Sensitivity Method, Brett F. Sanders and Nikolaos D. Katopodes, IR Sept./Oct. 99, p287-297.

Irrigation Offtake Sensitivity, D. Renault and H. M. Hemakumara, IR May/June 99, p131-136.

Offtake Sensitivity, Operation Effectiveness, and Performance of Irrigation System, D. Renault, IR May/June 99, p137-147.

Settling basins
Sediment Removal Efficiency of Settling Basins, K. G. Ranga Raju, U. C. Kothyari, Somya Srivastav and Manish Saxena, IR Sept./Oct. 99, p308-314.

Sewers
Sewer Sideweir with Throttling Pipe, Giuseppe Del Giudice and Willi H. Hager, IR Sept./Oct. 99, p298-306.

Simulation
Simulating Furrow Irrigation with Different Inflow Patterns, A. A. Alazba, IR Jan./Feb. 99, p12-18.

Slopes
Modeling Hydrological Processes in Hillslope Watershed of Humid Tropics, Noble Abraham and K. N. Tiwari, IR July/Aug. 99, p203-211.

Transient Drainage to Partially Penetrating Drains in Sloping Aquifers, K. N. Shukla, H. S. Chauhan and V. K. Srivastava, IR Sept./Oct. 99, p246-253.

Snow
Sand Recovery for Highway Drainage Designs, James C. Y. Guo, IR Nov./Dec. 99, p380-384.

Soil pollution
Modeling Sorption Behavior of Atrazine on Intact Soil Columns, Jinhe Li, Shiv O. Prasher, Roberto S. Clemente, William D. Reynolds, Ward N. Smith, Donald S. Gamble, Edward Topp, Cooper H. Langford and Farhad Salehi, IR July/Aug. 99, p212-222.

Soil water
Modeling Water Uptake by Plant Roots, Shashi Mathur and Sandhya Rao, IR May/June 99, p159-165.

Soil water movement
Vadose Zone Flow and Transport in Cracked Heavy Textured Soil, Bhaskar Joshi and Charles Maulé, IR May/June 99, p122-130.

Soils
Vadose Zone Flow and Transport in Cracked Heavy Textured Soil, Bhaskar Joshi and Charles Maulé, IR May/June 99, p122-130.

Soils, saturated
Modeling Hydrological Processes in Hillslope Watershed of Humid Tropics, Noble Abraham and K. N. Tiwari, IR July/Aug. 99, p203-211.

Solutes
Vadose Zone Flow and Transport in Cracked Heavy Textured Soil, Bhaskar Joshi and Charles Maulé, IR May/June 99, p122-130.

Sorption
Modeling Sorption Behavior of Atrazine on Intact Soil Columns, Jinhe Li, Shiv O. Prasher, Roberto S. Clemente, William D. Reynolds, Ward N. Smith, Donald S. Gamble, Edward Topp, Cooper H. Langford and Farhad Salehi, IR July/Aug. 99, p212-222.

Spacing
Theory of Pipe Drainage Assisted by Mole Drainage, Helmi M. Hathoot, IR Mar./Apr. 98, p102-107.

Transient Drainage to Partially Penetrating Drains in Sloping Aquifers, K. N. Shukla, H. S. Chauhan and V. K. Srivastava, IR Sept./Oct. 99, p246-253.

Spillways
Adjusted Factor G_a for Pipelines with Multiple Outlets and Outflow, Arif A. Anwar, IR Nov./Dec. 99, p355-359.

Factor G for Pipelines with Equally Spaced Multiple Outlets and Outflow, Arif A. Anwar, IR Jan./Feb. 99, p34-38.

Spraying
LEPA and Spray Irrigation for Grain Crops, Arland D. Schneider and Terry A. Howell, IR July/Aug. 99, p167-172.

Sprinkler irrigation
Adjusted Factor G_a for Pipelines with Multiple Outlets and Outflow, Arif A. Anwar, IR Nov./Dec. 99, p355-359.

Factor G for Pipelines with Equally Spaced Multiple Outlets and Outflow, Arif A. Anwar, IR Jan./Feb. 99, p34-38.

LEPA and Spray Irrigation for Grain Crops, Arland D. Schneider and Terry A. Howell, IR July/Aug. 99, p167-172.

Sprinklers
Friction Correction Factors for Center-Pivots, Arif A. Anwar, IR Sept./Oct. 99, p280-286.

Stability
Stability and Mobility of Sand-Bed Channels Affected by Seepage, Achanta Ramakrishna Rao and Nagaraj Sitaram, IR Nov./Dec. 99, p370-379.

Streams
Estimation of Hydraulic Diffusivity in Stream-Aquifer System, Govinda C. Mishra and Sharad K. Jain, IR Mar./Apr. 99, p74-81.

Subcritical flow
Theoretical End-Depth-Discharge Relationship for Free Overfall, Vito Ferro, IR Jan./Feb. 99, p40-44.

Subirrigation
Subirrigation and Intercropping to Minimize Nitrate Leaching from Corn Production Systems, J. Wambua Kaluli, Chandra A. Madramootoo, Xiaomin Zhou, Angus F. MacKenzie and Donald L. Smith, IR Mar./Apr. 99, p52-58.

Subsurface drainage
Controlling Irrigation Water Flow to Mole Drains, E. W. Christen and G. Spoor, IR Mar./Apr. 99, p59-63.

Theory of Pipe Drainage Assisted by Mole Drainage, Helmi M. Hathoot, IR Mar./Apr. 98, p102-107.

Sudan
Grass ET Estimates Using Penman-Type Equations in Central Sudan, Ahmed S. A. Hussein, IR Nov./Dec. 99, p324-329.

Supercritical flow
Theoretical End-Depth-Discharge Relationship for Free Overfall, Vito Ferro, IR Jan./Feb. 99, p40-44.

Surface irrigation
Explicit Volume Balance Model Solution, A. A. Alazba, IR Sept./Oct. 99, p273-279.

Kostiakov Infiltration Parameters from Kinematic Wave Model, Joel Cahoon, IR Mar./Apr. 98, p127-130.

Surface properties
Evapotranspiration: Concepts and Future Trends, Luis S. Pereira, Alain Perrier, Richard G. Allen and Isabel Alves, IR Mar./Apr. 99, p45-51.

Surface waters
Analytical Ground-Water Flow Solutions for Channel-Aquifer Interaction, Avi Ostfeld, Eusuff Muzaffar and Kevin E. Lansey, IR July/Aug. 99, p196-202.

Temperature effects
Effects of Temperature Changes on Emitter Discharge, Leonor Rodríguez-Sinobas, Luis Juana and Alberto Losada, IR Mar./Apr. 99, p64-73.

Tests
Response of ASCE Task Committee Test Cases to Open-Loop Control Measures, E. Bautista and A. J. Clemmens, IR July/Aug. 99, p179-188.

Time factors
Explicit Time of Advance Formula for Furrow Design, John D. Valiantzas, IR Jan./Feb. 99, p19-25.

Transport phenomena
Analytical Modeling of Nitrogen Dynamics in Soils and Ground Water, A. Jake Gusman and Miguel A. Mariño, IR Nov./Dec. 99, p330-337.

Nitrate Dynamics Under Cyclic Irrigation Pumpage, Chittaranjan Ray and Walton R. Kelly, IR Sept./Oct. 99, p254-263.

Vadose Zone Flow and Transport in Cracked Heavy Textured Soil, Bhaskar Joshi and Charles Maulé, IR May/June 99, p122-130.

Trickle irrigation
Adjusted Factor G_a for Pipelines with Multiple Outlets and Outflow, Arif A. Anwar, IR Nov./Dec. 99, p355-359.

Factor G for Pipelines with Equally Spaced Multiple Outlets and Outflow, Arif A. Anwar, IR Jan./Feb. 99, p34-38.

Modeling of Evaporation Reduction in Drip Irrigation System, Masoud Meshkat, Richard C. Warner and Stephen R. Workman, IR Nov./Dec. 99, p315-323.

Uniformity
Estimation of Global Irrigation Distribution Uniformity, A. J. Clemmens and K. H. Solomon, IR Nov./Dec. 97, p454-461.

Irrigation Performance Measures: Efficiency and Uniformity, C. M. Burt, A. J. Clemmens, T. S. Strelkoff, K. H. Solomon, R. D. Bliesner, L. A. Hardy, T. A. Howell and D.E. Eisenhauer, IR Nov./Dec. 97, p423-442.

Unsteady flow
Control of Canal Flow by Adjoint Sensitivity Method, Brett F. Sanders and Nikolaos D. Katopodes, IR Sept./Oct. 99, p287-297.

Vadose zone
Vadose Zone Flow and Transport in Cracked Heavy Textured Soil, Bhaskar Joshi and Charles Maulé, IR May/June 99, p122-130.

Vegetation
Modeling Water Uptake by Plant Roots, Shashi Mathur and Sandhya Rao, IR May/June 99, p159-165.

Volume measure
Explicit Volume Balance Model Solution, A. A. Alazba, IR Sept./Oct. 99, p273-279.

Wastewater
Infiltration Considerations for Ground-Water Recharge with Waste Effluent, Sandra L. Houston, Peter D. Duryea and Ruijin Hong, IR Sept./Oct. 99, p264-272.

Water balance
Explicit Volume Balance Model Solution, A. A. Alazba, IR Sept./Oct. 99, p273-279.

Water depth
Offtake Sensitivity, Operation Effectiveness, and Performance of Irrigation System, D. Renault, IR May/June 99, p137-147.

Water distribution
Irrigation Offtake Sensitivity, D. Renault and H. M. Hemakumara, IR May/June 99, p131-136.

Offtake Sensitivity, Operation Effectiveness, and Performance of Irrigation System, D. Renault, IR May/June 99, p137-147.

Water flow
Controlling Irrigation Water Flow to Mole Drains, E. W. Christen and G. Spoor, IR Mar./Apr. 99, p59-63.

Explicit Volume Balance Model Solution, A. A. Alazba, IR Sept./Oct. 99, p273-279.

Water levels
Modeling of Irrigation and Drainage Canals for Controller Design, Schuurmans J., A. J. Clemmens, S. Dijkstra, A. Hof and R. Brouwer, IR Nov./Dec. 99, p338-344.

Simple Water Level Controller for Irrigation and Drainage Canals, J. Schuurmans, A. Hof, S. Dijkstra, O. H. Bosgra and R. Brouwer, IR July/Aug. 99, p189-195.

Water management
Development of Management Models for Sustainable Use of Coastal Aquifers, Amlan Das and Bithin Datta, IR May/June 99, p112-121.

Water quality
Nitrate Dynamics Under Cyclic Irrigation Pumpage, Chittaranjan Ray and Walton R. Kelly, IR Sept./Oct. 99, p254-263.

Water resources management
Grass ET Estimates Using Penman-Type Equations in Central Sudan, Ahmed S. A. Hussein, IR Nov./Dec. 99, p324-329.

Optimal Allocation of Irrigation Water Supplies in Real Time, Robin Wardlaw and Jonathan Barnes, IR Nov./Dec. 99, p345-354.

Water table

Transient Drainage to Partially Penetrating Drains in Sloping Aquifers, K. N. Shukla, H. S. Chauhan and V. K. Srivastava, IR Sept./Oct. 99, p246-253.

Water use

LEPA and Spray Irrigation for Grain Crops, Arland D. Schneider and Terry A. Howell, IR July/Aug. 99, p167-172.

Watersheds

Modeling Hydrological Processes in Hillslope Watershed of Humid Tropics, Noble Abraham and K. N. Tiwari, IR July/Aug. 99, p203-211.

Regional Regression Models of Annual Streamflow for the United States, Richard M. Vogel, Ian Wilson and Chris Daly, IR May/June 99, p148-157.

Weighing devices

Modeling of Evaporation Reduction in Drip Irrigation System, Masoud Meshkat, Richard C. Warner and Stephen R. Workman, IR Nov./Dec. 99, p315-323.

Weirs

Sewer Sideweir with Throttling Pipe, Giuseppe Del Giudice and Willi H. Hager, IR Sept./Oct. 99, p298-306.

Wells

Measuring Irrigation Well Discharges, John Replogle, IR July/Aug. 99, p223-229.

AUTHOR INDEX

Abraham, Noble
Modeling Hydrological Processes in Hillslope Watershed of Humid Tropics, with K. N. Tiwari, IR July/Aug. 99, p203-211

Alazba, A. A.
Explicit Volume Balance Model Solution, IR Sept./Oct. 99, p273-279
Simulating Furrow Irrigation with Different Inflow Patterns, IR Jan./Feb. 99, p12-18

Allen, R. G.
see Temesgen, B., IR Jan./Feb. 99, p26-33

Allen, Richard G.
see Pereira, Luis S., IR Mar./Apr. 99, p45-51

Alves, Isabel
see Pereira, Luis S., IR Mar./Apr. 99, p45-51

Anwar, Arif A.
Adjusted Factor G_c for Pipelines with Multiple Outlets and Outflow, IR Nov./Dec. 99, p355-359
Baffle Sluice Modules with Improved Performance, IR Mar./Apr. 99, p91-95
Factor G for Pipelines with Equally Spaced Multiple Outlets and Outflow, IR Jan./Feb. 99, p34-38
Friction Correction Factors for Center-Pivots, IR Sept./Oct. 99, p280-286

Barnes, Jonathan
see Wardlaw, Robin, IR Nov./Dec. 99, p345-354

Bautista, E.
Response of ASCE Task Committee Test Cases to Open-Loop Control Measures, with A. J. Clemmens, IR July/Aug. 99, p179-188

Bliesner, R. D.
see Burt, C. M., IR Nov./Dec. 97, p423-442

Bosgra, O. H.
see Schuurmans, J., IR July/Aug. 99, p189-195

Brouwer, R.
see Schuurmans, J., IR July/Aug. 99, p189-195
see Schuurmans J., IR Nov./Dec. 99, p338-344

Burt, C. M.
Irrigation Performance Measures: Efficiency and Uniformity, with A. J. Clemmens, T. S. Strelkoff, K. H. Solomon, R. D. Bliesner, L. A. Hardy, T. A. Howell and D.E. Eisenhauer, IR Nov./Dec. 97, p423-442
disc: John L. Merriam, P.E., IR Mar./Apr. 99, p97-98
clo: IR Mar./Apr. 99, p98-100

Cahoon, Joel
Kostiakov Infiltration Parameters from Kinematic Wave Model, IR Mar./Apr. 98, p127-130
disc: A. J. Clemmens, IR Nov./Dec. 99, p386-387
clo: IR Nov./Dec. 99, p388

Chauhan, H. S.
see Shukla, K. N., IR Sept./Oct. 99, p246-253

Christen, E. W.
Controlling Irrigation Water Flow to Mole Drains, with G. Spoor, IR Mar./Apr. 99, p59-63

Clemente, Roberto S.
see Li, Jinhe, IR July/Aug. 99, p212-222

Clemmens, A. J.
Estimation of Global Irrigation Distribution Uniformity, with K. H. Solomon, IR Nov./Dec. 97, p454-461
disc: John L. Merriam, P.E., IR Mar./Apr. 99, p100-101
clo: IR Mar./Apr. 99, p101-103
disc. (of Kostiakov Infiltration Parameters from Kinematic Wave Model, by Joel Cahoon, IR Mar./Apr. 98, p127-130), IR Nov./Dec. 99, p386-387
see Bautista, E., IR July/Aug. 99, p179-188
see Burt, C. M., IR Nov./Dec. 97, p423-442
see Schuurmans J., IR Nov./Dec. 99, p338-344

Daly, Chris
see Vogel, Richard M., IR May/June 99, p148-157

Das, Amlan
Development of Management Models for Sustainable Use of Coastal Aquifers, with Bithin Datta, IR May/June 99, p112-121

Datta, Bithin
see Das, Amlan, IR May/June 99, p112-121

Del Giudice, Giuseppe
Sewer Sideweir with Throttling Pipe, with Willi H. Hager, IR Sept./Oct. 99, p298-306

Dijkstra, S.
see Schuurmans, J., IR July/Aug. 99, p189-195
see Schuurmans J., IR Nov./Dec. 99, p338-344

Dissanayake, Pujitha B. G.
see Jayawardena, Amithirigala W., IR Mar./Apr. 99, p82-89

Duryea, Peter D.
see Houston, Sandra L., IR Sept./Oct. 99, p264-272

Eid, Naglaa
Nitrate Electromigration in Sandy Soil in the Presence of Hydraulic Flow, with Dennis Larson, Donald Slack and Panagioyis Kiousis, IR Jan./Feb. 99, p7-11

Eisenhauer, D.E.
see Burt, C. M., IR Nov./Dec. 97, p423-442

Ferro, Vito
Theoretical End-Depth-Discharge Relationship for Free Overfall, IR Jan./Feb. 99, p40-44

Gamble, Donald S.
see Li, Jinhe, IR July/Aug. 99, p212-222

Guo, James C. Y.
Sand Recovery for Highway Drainage Designs, IR Nov./Dec. 99, p380-384

Gusman, A. Jake
Analytical Modeling of Nitrogen Dynamics in Soils and Ground Water, with Miguel A. Mariño, IR Nov./Dec. 99, p330-337

Hager, Willi H.
see Del Giudice, Giuseppe, IR Sept./Oct. 99, p298-306

Haman, Dorota Z.
see Kirpich, Phillip Z., IR Jan./Feb. 99, p1-6

Hardy, L. A.
see Burt, C. M., IR Nov./Dec. 97, p423-442

Hathoot, Helmi M.
Theory of Pipe Drainage Assisted by Mole Drainage, IR Mar./Apr. 98, p102-107
disc: A. R. Kacimov, IR July/Aug. 99, p231-232
clo: IR July/Aug. 99, p232-233

Hemakumara, H. M.
see Renault, D., IR May/June 99, p131-136

Hof, A.
see Schuurmans, J., IR July/Aug. 99, p189-195
see Schuurmans J., IR Nov./Dec. 99, p338-344

Hong, Ruijin
see Houston, Sandra L., IR Sept./Oct. 99, p264-272

Houston, Sandra L.
Infiltration Considerations for Ground-Water Recharge with Waste Effluent, with Peter D. Duryea and Ruijin Hong, IR Sept./Oct. 99, p264-272

Howell, T. A.
see Burt, C. M., IR Nov./Dec. 97, p423-442

Howell, Terry A.
see Schneider, Arland D., IR July/Aug. 99, p167-172

Hussein, Ahmed S. A.
Grass ET Estimates Using Penman-Type Equations in Central Sudan, IR Nov./Dec. 99, p324-329

Ito, H.
Economics of Furrow Irrigation under Partial Infiltration Information, with W. W. Wallender and N. S. Raghuwanshi, IR May/June 99, p105-111

Jain, Sharad K.
see Mishra, Govinda C., IR Mar./Apr. 99, p74-81

Jayawardena, Amithirigala W.
Effective Hydraulic Conductivity for Partially Saturated Porous Media, with Pujitha B. G. Dissanayake, IR Mar./Apr. 99, p82-89

Jensen, D. T.
see Temesgen, B., IR Jan./Feb. 99, p26-33

Joshi, Bhaskar
Vadose Zone Flow and Transport in Cracked Heavy Textured Soil, with Charles Maulé, IR May/June 99, p122-130

Juana, Luis
see Rodríguez-Sinobas, Leonor, IR Mar./Apr. 99, p64-73

Kacimov, A. R.
disc. (of Theory of Pipe Drainage Assisted by Mole Drainage, by Helmi M. Hathoot, IR Mar./Apr. 98, p102-107), IR July/Aug. 99, p231-232

Kaluli, J. Wambua
Subirrigation and Intercropping to Minimize Nitrate Leaching from Corn Production Systems, with Chandra A. Madramootoo, Xiaomin Zhou, Angus F. MacKenzie and Donald L. Smith, IR Mar./Apr. 99, p52-58

Katopodes, Nikolaos D.
see Sanders, Brett F., IR Sept./Oct. 99, p287-297

Kelly, Walton R.
see Ray, Chittaranjan, IR Sept./Oct. 99, p254-263

Kiousis, Panagioyis
see Eid, Naglaa, IR Jan./Feb. 99, p7-11

Kirpich, Phillip Z.
Problems of Irrigation in Developing Countries, with Dorota Z. Haman and Stuart W. Styles, IR Jan./Feb. 99, p1-6

Kothyari, U. C.
see Raju, K. G. Ranga, IR Sept./Oct. 99, p308-314

Langford, Cooper H.
see Li, Jinhe, IR July/Aug. 99, p212-222

Lansey, Kevin E.
see Ostfeld, Avi, IR July/Aug. 99, p196-202

Larson, Dennis
see Eid, Naglaa, IR Jan./Feb. 99, p7-11

Li, Jinhe
Modeling Sorption Behavior of Atrazine on Intact Soil Columns, with Shiv O. Prasher, Roberto S. Clemente, William D. Reynolds, Ward N. Smith, Donald S. Gamble, Edward Topp, Cooper H. Langford and Farhad Salehi, IR July/Aug. 99, p212-222

Lorah, William L.
see Wright, Kenneth R., IR Nov./Dec. 99, p360-369

Losada, Alberto
see Rodríguez-Sinobas, Leonor, IR Mar./Apr. 99, p64-73

MacKenzie, Angus F.
see Kaluli, J. Wambua, IR Mar./Apr. 99, p52-58

Madramootoo, Chandra A.
see Kaluli, J. Wambua, IR Mar./Apr. 99, p52-58

Mariño, Miguel A.
see Gusman, A. Jake, IR Nov./Dec. 99, p330-337

Mathur, Shashi
Modeling Water Uptake by Plant Roots, with Sandhya Rao, IR May/June 99, p159-165

Maulé, Charles
see Joshi, Bhaskar, IR May/June 99, p122-130

Merriam, John L., P.E.
disc. (of Estimation of Global Irrigation Distribution Uniformity, by A. J. Clemmens and K. H. Solomon, IR Nov./Dec. 97, p454-461), IR Mar./Apr. 99, p100-101
disc. (of Irrigation Performance Measures: Efficiency and Uniformity, by C. M. Burt, A. J. Clemmens, T. S. Strelkoff, K. H. Solomon, R. D. Bliesner, L. A. Hardy, T. A. Howell and D.E. Eisenhauer, IR Nov./Dec. 97, p423-442), IR Mar./Apr. 99, p97-98

Meshkat, Masoud
Modeling of Evaporation Reduction in Drip Irrigation System, with Richard C. Warner and Stephen R. Workman, IR Nov./Dec. 99, p315-323

Mishra, Govinda C.
Estimation of Hydraulic Diffusivity in Stream-Aquifer System, with Sharad K. Jain, IR Mar./Apr. 99, p74-81

Muzaffar, Eusuff
see Ostfeld, Avi, IR July/Aug. 99, p196-202

Ostfeld, Avi
Analytical Ground-Water Flow Solutions for Channel-Aquifer Interaction, with Eusuff Muzaffar and Kevin E. Lansey, IR July/Aug. 99, p196-202

Pereira, Luis S.
Evapotranspiration: Concepts and Future Trends, with Alain Perrier, Richard G. Allen and Isabel Alves, IR Mar./Apr. 99, p45-51

Perrier, Alain
see Pereira, Luis S., IR Mar./Apr. 99, p45-51

Prasher, Shiv O.
see Li, Jinhe, IR July/Aug. 99, p212-222

Raghuwanshi, N. S.
see Ito, H., IR May/June 99, p105-111
see Upadhyaya, Shrini K., IR July/Aug. 99, p173-178

Raju, K. G. Ranga
Sediment Removal Efficiency of Settling Basins, with U. C. Kothyari, Somya Srivastav and Manish Saxena, IR Sept./Oct. 99, p308-314

Rao, Achanta Ramakrishna
Stability and Mobility of Sand-Bed Channels Affected by Seepage, with Nagaraj Sitaram, IR Nov./Dec. 99, p370-379

Rao, Sandhya
see Mathur, Shashi, IR May/June 99, p159-165

Ray, Chittaranjan
Nitrate Dynamics Under Cyclic Irrigation Pumpage, with Walton R. Kelly, IR Sept./Oct. 99, p254-263

Renault, D.
Irrigation Offtake Sensitivity, with H. M. Hemakumara, IR May/June 99, p131-136
Offtake Sensitivity, Operation Effectiveness, and Performance of Irrigation System, IR May/June 99, p137-147

Replogle, John
Measuring Irrigation Well Discharges, IR July/Aug. 99, p223-229

Reynolds, William D.
see Li, Jinhe, IR July/Aug. 99, p212-222

Rodríguez-Sinobas, Leonor
Effects of Temperature Changes on Emitter Discharge, with Luis Juana and Alberto Losada, IR Mar./Apr. 99, p64-73

Salehi, Farhad
see Li, Jinhe, IR July/Aug. 99, p212-222

Sanders, Brett F.
Control of Canal Flow by Adjoint Sensitivity Method, with Nikolaos D. Katopodes, IR Sept./Oct. 99, p287-297

Saxena, Manish
see Raju, K. G. Ranga, IR Sept./Oct. 99, p308-314

Schneider, Arland D.
LEPA and Spray Irrigation for Grain Crops, with Terry A. Howell, IR July/Aug. 99, p167-172

Schuurmans J.
Modeling of Irrigation and Drainage Canals for Controller Design, with A. J. Clemmens, S. Dijkstra, A. Hof and R. Brouwer, IR Nov./Dec. 99, p338-344

Schuurmans, J.
Simple Water Level Controller for Irrigation and Drainage Canals, with A. Hof, S. Dijkstra, O. H. Bosgra and R. Brouwer, IR July/Aug. 99, p189-195

Shukla, K. N.
Transient Drainage to Partially Penetrating Drains in Sloping Aquifers, with H. S. Chauhan and V. K. Srivastava, IR Sept./Oct. 99, p246-253

Sitaram, Nagaraj
see Rao, Achanta Ramakrishna, IR Nov./Dec. 99, p370-379

Slack, Donald
see Eid, Naglaa, IR Jan./Feb. 99, p7-11

Smith, Donald L.
see Kaluli, J. Wambua, IR Mar./Apr. 99, p52-58

Smith, Ward N.
see Li, Jinhe, IR July/Aug. 99, p212-222

Solomon, K. H.
see Burt, C. M., IR Nov./Dec. 97, p423-442
see Clemmens, A. J., IR Nov./Dec. 97, p454-461

Spoor, G.
see Christen, E. W., IR Mar./Apr. 99, p59-63

Srivastav, Somya
see Raju, K. G. Ranga, IR Sept./Oct. 99, p308-314

Srivastava, V. K.
see Shukla, K. N., IR Sept./Oct. 99, p246-253

Strelkoff, T. S.
see Burt, C. M., IR Nov./Dec. 97, p423-442

Styles, Stuart W.
see Kirpich, Phillip Z., IR Jan./Feb. 99, p1-6

Temesgen, B.
Adjusting Temperature Parameters to Reflect Well-Watered Conditions, with R. G. Allen and D. T. Jensen, IR Jan./Feb. 99, p26-33

Tiwari, K. N.
see Abraham, Noble, IR July/Aug. 99, p203-211

Todorovic, Mladen
Single-Layer Evapotranspiration Model with Variable Canopy Resistance, IR Sept./Oct. 99, p235-245

Topp, Edward
see Li, Jinhe, IR July/Aug. 99, p212-222

Upadhyaya, Shrini K.
Semiempirical Infiltration Equation for Furrow Irrigation Systems, with N. S. Raghuwanshi, IR July/Aug. 99, p173-178

Valiantzas, John D.
Explicit Time of Advance Formula for Furrow Design, IR Jan./Feb. 99, p19-25

Vogel, Richard M.
Regional Regression Models of Annual Streamflow for the United States, with Ian Wilson and Chris Daly, IR May/June 99, p148-157

Wallender, W. W.
see Ito, H., IR May/June 99, p105-111

Wardlaw, Robin
Optimal Allocation of Irrigation Water Supplies in Real Time, with Jonathan Barnes, IR Nov./Dec. 99, p345-354

Warner, Richard C.
see Meshkat, Masoud, IR Nov./Dec. 99, p315-323

Wilson, Ian
see Vogel, Richard M., IR May/June 99, p148-157

Workman, Stephen R.
see Meshkat, Masoud, IR Nov./Dec. 99, p315-323

Wright, Kenneth R.
Ancient Machu Picchu Drainage Engineering, with Alfredo Valencia Zegarra and William L. Lorah, IR Nov./Dec. 99, p360-369

Zegarra, Alfredo Valencia
see Wright, Kenneth R., IR Nov./Dec. 99, p360-369

Zhou, Xiaomin
see Kaluli, J. Wambua, IR Mar./Apr. 99, p52-58